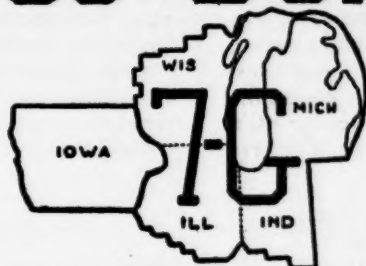


BUSINESS CONDITIONS

SEVENTH
FEDERAL



RESERVE
DISTRICT

Volume 11, No. 11

MONTHLY REVIEW PUBLISHED BY THE
FEDERAL RESERVE BANK OF CHICAGO

November 1, 1928

NATIONAL SUMMARY OF BUSINESS CONDITIONS

VOLUME of production and distribution of commodities increased seasonally in September and was larger than a year ago. There was a further advance in the general price level. Loans of member banks in leading cities increased in September and October in response to the seasonal demand for commercial credit.

PRODUCTION—Industrial production increased further in September, and the output of manufactures was in larger volume than in any previous month. Factory employment and payrolls also increased. Production of iron and steel and of automobiles was unusually large during September and October, although there has recently been some curtailment of operations in these industries. There were also increases in September in the activity of the textile, meat-packing, and tire industries and in the output of coal, petroleum, and copper, while lumber production showed a decline. Building contracts awarded, after declining in volume for three months, increased considerably in September and exceeded all previous records for that month. The increase was due chiefly to certain large contracts for industrial plants and subway construction. During the first three weeks of October, awards exceeded those for the same period last year, the excess being especially large in the eastern districts.

Department of Agriculture estimates of this year's crop

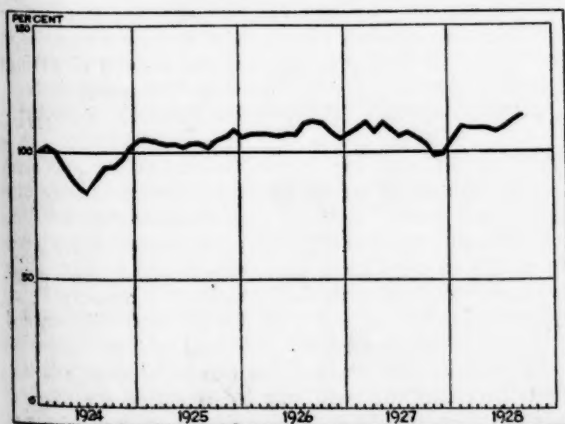
yields indicate that the production of all crops in the aggregate will exceed last year's output by about 5 per cent. The corn crop is estimated at 2,903,000,000 bushels, or 5 per cent above last year's production. The October 8 estimate estimated a cotton crop of 13,993,000 bales, or 446,000 bales less than was forecast on September 8, compared with a yield of 12,955,000 in 1927.

TRADE—Department store sales increased considerably in September and were larger than a year ago, reflecting in part the influence of cooler weather. Inventories of department stores at the end of the month were smaller than on the same date of last year. Wholesale distribution in all leading lines except meats was somewhat smaller than in September 1927. Freight carloadings showed more than a seasonal increase in September, and continued large in October. Shipments of miscellaneous commodities in recent weeks have continued in larger volume than in previous years.

PRICES—Wholesale commodity prices increased further in September and the Bureau of Labor Statistics index advanced to 100.1 per cent of the 1926 average. Increases, which were largest in farm products and foods, occurred in nearly all groups except hides and leather and textiles, which showed slight declines.

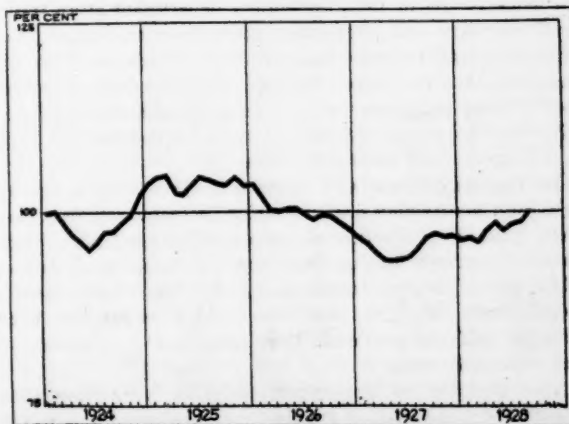
Since the latter part of September there have been de-

INDUSTRIAL PRODUCTION



Index number of production of manufactures and minerals combined, adjusted for seasonal variations (1923-1925 average = 100). Latest figure, September, 1928: 114.

WHOLESALE PRICES



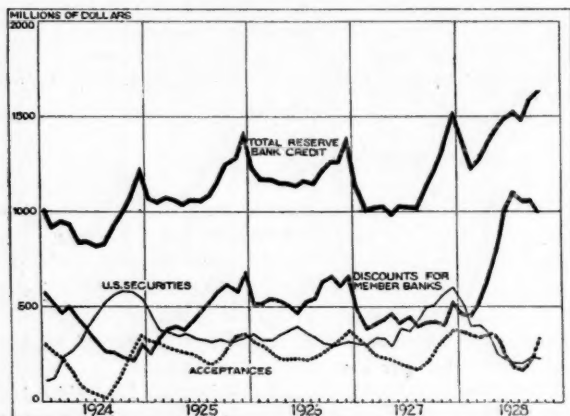
Index of the U. S. Bureau of Labor Statistics (1926 = 100, base adopted by the Bureau). Latest figure, September, 1928: 100.1.

Compiled October 26, 1928

creases in the prices of live stock and meats, grains, wool and hides, and increases in cotton, silk, rubber, and iron and steel.

BANK CREDIT—Demand for bank credit for commercial purposes increased between the middle of September and the middle of October, reflecting seasonal activity in trade and the marketing of crops. There was also a growth in loans to brokers and dealers in securities, though total loans on securities of reporting member banks showed little change. During the four weeks ending on October 24, a growth of about \$40,000,000 in the total volume of reserve

RESERVE BANK CREDIT

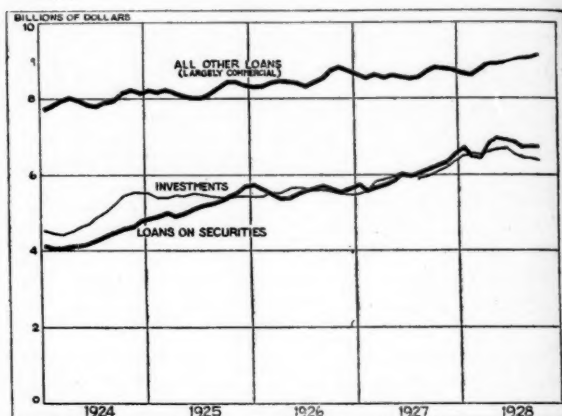


Monthly averages of daily figures for twelve Federal Reserve banks. Latest figures, averages for first 23 days in October, 1928: Total Reserve Bank Credit, 1,629 million; Discounts for Member Banks, 996 million; U. S. Securities, 238 million; and Acceptances, 349 million.

bank credit in use was due chiefly to continued increase in the demand for currency, offset in part by a small inflow of gold from abroad. Reserve bank holdings of acceptances increased by about \$140,000,000 during the period, while the volume of discounts for member banks declined by about \$100,000,000. United States security holdings remained practically unchanged.

Open-market rates on commercial paper and on bank acceptances remained unchanged between the middle of September and the latter part of October, while rates on security loans declined in October.

MEMBER BANK CREDIT



Monthly averages of weekly figures for banks in 101 leading cities. Latest figures, averages for first three weekly report dates in October, 1928: All Other Loans (largely commercial), 9,188 million; Loans on Securities, 6,747 million; and Investments, 6,406 million.

BUSINESS CONDITIONS IN THE SEVENTH RESERVE DISTRICT

Most aspects of industry and trade in the Seventh district show betterment over a year ago at this time. The iron and steel industry has been very active, September automobile and agricultural machinery production were in excess of last September, malleable foundry operations and output of stoves and furnaces gained in the comparison, while orders and factory shipments of furniture for the first time this year exceeded the corresponding month of 1927. Leather production, output of steel castings, and building contracts awarded declined from September a year ago, although the last-mentioned for the nine months of this year show an aggregate gain of more than ten per cent over the same period of 1927. September department store trade, retail furniture and shoe sales, chain store trade, and mail order sales, all recorded expansion in comparison with the same month a year ago. Half the wholesale lines reporting to this bank had larger sales than last September, and distribution of automobiles continued above the level of 1927, as did agricultural machinery sales.

In the comparison with conditions prevailing a month ago, both contraction and expansion in manufacturing lines were evident, production of automobiles, agricultural machinery, castings, leather, and shoes showing a recession, while that of iron and steel, stoves, and furniture increased. Retail trade statistics indicate decided expansion over August; half the wholesale lines increased their sales and half reported losses.

The position of agriculture remains very favorable. Weather conditions in the main have been propitious to the maturing of crops, and the harvests of most grain, fruit, and other farm products have been considerably heavier than in 1927. Grain prices averaged somewhat higher in

September than a month previous, and live-stock prices for the most part increased and were measurably above the levels of a year ago. Production and sales at meat packing plants gained over August, and sales totaled more than last September. Butter production and sales declined in the monthly comparison, while the former was heavier than a year ago and the latter smaller.

Little change has taken place in the credit situation from a month ago, the demand for funds remaining active and rates firm. Loans and discounts of reporting member banks, as well as reserve bank credit, continue at relatively high levels. Commercial paper sales increased in September over August, but were below a year ago, and transactions in bankers' acceptances were smaller in both comparisons. The volume of check payment and the amount of savings deposits gained over a month previous and a year ago.

CREDIT CONDITIONS AND MONEY RATES

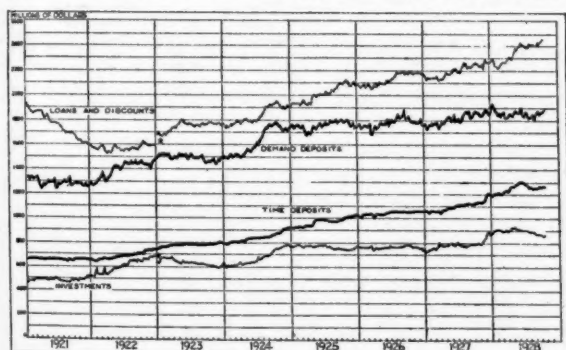
Credit conditions in the district are substantially as a month ago; demand for funds continues active, and rates have shown a slight firming in several centers. In the Chicago money market funds are slightly easier than a month ago; demand for commercial purposes has expanded since the middle of September, but loans on stocks and bonds have manifested a downward tendency. Rates are unchanged from last month: $5\frac{1}{2}$ to 6 per cent on collateral and customers' over-the-counter loans and $6\frac{1}{2}$ per cent on brokers' loans. The average rate earned on loans and discounts by ten of the large loop banks during the calendar month of September was 5.73 per cent, compared with 5.50 per cent in August and 4.85 per cent in September a year ago. In Detroit the corresponding figure for five large banks in September was 5.76 per cent, 5.61 in August, and

5.27 per cent in September, 1927. The prevailing rate in that city on customers' loans for the week ending October 15 was $5\frac{1}{2}$ to 6 per cent.

Reserve bank credit in use in the Seventh district rose from \$184,647,000 September 19 to \$187,544,000 October 17, which compares with \$156,245,000 October 19, 1927. Loans to member banks on October 17 amounted to \$125,804,000, on September 19 to \$114,311,000, and on October 19 a year ago to \$51,129,000. United States securities receded slightly from the level of the preceding two months and on October 17 totaled \$33,716,000. The volume of Federal Reserve notes in circulation by October 17 had mounted to \$296,902,000, the largest since April 16, 1924, with \$302,803,000. On September 19 it aggregated \$288,542,000, and on October 19 a year ago \$239,276,000.

Loans and discounts of reporting member banks in the Seventh district on October 17 rose to a new high peak of \$2,461,430,000, as compared with \$2,438,743,000 on September 19, and \$2,319,423,000 on October 19, 1927, reflecting increases largely in commercial loans. Investments were reduced from \$876,066,000 on September 19 to \$870,776,000 by October 17, the principal item of reduction being United States securities in Chicago. Net demand deposits rose from \$1,874,998,000 on September 19 to \$1,894,696,000 on October 17, a large part of the increase taking place in Detroit. On October 19, 1927, they totaled \$1,887,631,000. Time deposits dropped from \$1,265,551,000 on September 19 to \$1,262,860,000 on October 17, and on the corresponding date last year stood at \$1,192,109,000.

POSITION REPORTING MEMBER BANKS, 7TH DISTRICT



*Break in curve indicates data not comparable with preceding. Based on weekly reports to this bank by approximately 49 member banks in Chicago, 13 in Detroit, and 44 in other selected cities. Latest figures, October 17, 1928, in thousands of dollars: Loans and Discounts, 2,461,430; Demand Deposits, 1,894,696; Time Deposits, 1,262,860; and Investments, 870,776.

Reports from eleven dealers show September sales of commercial paper in the Middle West 1.4 per cent greater than in August, but 26.4 per cent below a year ago and 28.0 per cent less than the 1923-27 September average. The supply of paper was small to moderate with a noticeable scarcity of prime names; demand remained poor from city banks and fair to good from the country and outlying territory. Sales of three local concerns for the first half of October decreased from the corresponding period of September. Supplies continued moderate and the demand fair. Selling rates for September ranged from $5\frac{1}{4}$ and $5\frac{1}{2}$ per cent for low to $5\frac{1}{2}$ and 6 per cent for high (mostly $5\frac{3}{4}$), and averaged $5\frac{1}{2}$ to $5\frac{3}{4}$ per cent. Quotations on October 13 closed at $5\frac{1}{4}$ to $5\frac{1}{2}$ per cent for low and $5\frac{3}{4}$ per cent for high, with the customary charge $5\frac{1}{2}$ to $5\frac{3}{4}$ per cent (some prime names moved at $5\frac{1}{4}$). September 29 outstandings of five dealers in the Middle West were 3.2 per cent greater than those of August 31, but 21.3 per cent under

last year; holdings of twenty-four dealers in the United States amounted to \$429,663,977.

Weekly purchases of six dealers in the Chicago open bill market were 9.8 per cent greater from September 13 to October 17 than from August 16 to September 12, and totaled 9.4 per cent in excess of last year, while receipts from other offices decreased 63.6 and 76.9 per cent in the comparisons. Sales declined 24.3 per cent from the preceding period and 49.9 per cent from a year ago, the latter recession being due to smaller purchases by local banks. Shipments to other offices averaged 17.1 per cent less than from August 16 to September 12 and 125.4 per cent larger than in 1927. The supply of paper was reported as rather small at the beginning of the period, and as fair to good at the close. Demand ranged between poor and fair. Preferences centered on 90- and 60-day maturities; there was good inquiry for 30-day paper at times. Transactions involved grain, canned goods, packing-house products, cotton, flour, dairy products, coal, iron goods, wool, lumber, merchandise, hides, sugar, artificial silk, copper, oil, burlap, sausage casings, tracing paper, and bark. Rates remained practically unchanged from a month ago, and closed on October 17 at $4\frac{1}{2}$ per cent for 30-day offerings to $4\frac{3}{4}$ per cent for 180 days. Holdings increased 18.2 per cent over those of August 15, but fell 38.1 per cent below a year ago.

September acceptances of sixteen banks in the Seventh district aggregated 27.1 per cent less than in the preceding month and 0.5 per cent below a year ago. Individually, however, six of the banks experienced an expansion over September, 1927. Purchases increased 25.5 per cent over August and declined 85.2 per cent from last year, while sales decreased 75.4 and 88.6 per cent in the respective comparisons. The volume of bills accepted at three local banks during the first half of October totaled in excess of the corresponding period of September, with bills drawn principally against packing-house products, machinery and tools, coffee, cotton, iron and steel, general merchandise, wine (Spain to Germany), tea, raw silk, burlap, rattan, egg albumen, grain, lumber, clothing, novelties, jute bagging, bicycles, shoes, fruit and nuts, hops, potash, and feathers. Liability for outstandings was reduced 7.3 per cent on September 29 from the end of August and 10.0 per cent from a year ago. Holdings rose 105.3 per cent over the August 31 level and fell 58.7 per cent below the corresponding date of 1927; the quantity of their own acceptances retained by the banks of origin increased 105.2 per cent over the preceding month and decreased 56.8 per cent from last year. The Federal Reserve Bank of Chicago bought \$26,246,667 of bankers' acceptances during September and had \$20,374,412 in its portfolio at the close of the month.

Volume of Payment by Check—Dollar aggregates for the volume of payment by check during September, as reported by clearing houses of thirty-seven cities within the Seventh district, amounted to \$6,711,661,000, an increase of 3.3 per cent over August and of 9.6 per cent over September a year ago. For the thirty-three smaller cities, lesser gains of 0.9 per cent and 3.3 per cent, respectively, were reported in the above-mentioned comparisons. The total volume in the four larger cities, Chicago, Detroit, Milwaukee, and Indianapolis, increased 3.7 per cent over a month previous and 10.8 per cent over September last year. Payments in Chicago. For the thirty-three smaller cities, lesser gains of and 5.0 per cent more than in September, 1927.

Savings Deposits—An increase of 0.7 per cent in regular savings deposits, of 0.5 per cent in number of accounts, and of 0.3 per cent in average amount was recorded on October 1 over the beginning of September, according to a compilation for 206 reporting banks in the Seventh district. The

volume of deposits exceeded the level for a year ago by 4.1 per cent, and the number of accounts and average deposits also gained 1.3 and 2.8 per cent in the comparison. Michigan and Indiana continued to register greater expansion over 1927 than the remainder of the district, and Illinois experienced a recession in number of accounts from last year; with these exceptions, the state totals closely followed the general trend of the district. Individually, however, 48 banks found deposits lower than on September 1 and 39 reported a decrease in the item from last year.

AGRICULTURAL PRODUCTION AND FOODSTUFFS

The outlook for agriculture in the Seventh district continues favorable. Most corn reached full maturity this autumn, and the crop is of unusually high quality. Dry weather during September tended to delay seeding to some extent. Frosts on September 24 and 27 stopped plant growth for the season, killed the garden truck, and did minor damage to very late plantings of corn. Mid-October found winter wheat seeding nearing completion under favorable moisture conditions, and the potato digging, lifting of sugar beets, corn cutting, and harvesting of other fall crops under way. The winter wheat above ground on October 15 showed a fairly even stand. Corn has been drying out satisfactorily.

CROP PRODUCTION

Estimated by the Bureau of Agricultural Economics as of October 1
(In thousands of bushels unless otherwise specified)

	SEVENTH DISTRICT		UNITED STATES		5-Yr. Av.
	1928	1927	1928	1927	
Corn	1,049,658	787,986	2,903,272	2,773,708	2,775,634
Spring wheat	6,812	5,304	325,266	319,307	251,362
Oats	616,324	454,805	1,452,966	1,184,146	1,351,723
Barley	83,325(a)	55,144(a)	350,593	264,392	192,020
Buckwheat	1,607(a)	1,618(a)	14,804	16,029	13,711
Flax	317(b)	379(b)	22,472	26,570	20,148
Potatoes (white)	77,086	51,925	463,722	406,964	393,766
Potatoes (sweet)	1,705(c)	1,524(c)	78,512	93,928	81,101
Dry Beans	5,163(d)	5,134(d)	15,896	16,891	16,335
Cucumbers for pickles	3,020(a)	1,096(a)	5,139	2,334
Danish cabbage	74(d)	73(d)	274	366
Domestic cabbage	111(e)	77(e)	241	302
Onions	4,534(a)	5,327(a)	18,716	23,059
Celery ***	710(f)	846(f)	2,944	3,626
Apples (tot. crop)	19,394(a)	12,907(a)	177,560	123,455
Peaches	3,449(g)	2,007(g)	67,875	45,463	54,302
Pears	1,744(g)	1,195(g)	23,304	18,072	20,677
Grapes*	92(a)	63(a)	2,605	2,465	2,095
Tobacco**	46,087	32,840	1,353,258	1,211,301	1,337,561
Tame hay*	16,782	20,940	92,688	106,468	90,967
Broom corn*	5.4(h)	5.3(h)	44.0	39.6	55.9
Sugar beets*	552(d)	788(d)	6,758	7,753	7,359

*In thousands of tons. **In thousands of pounds. ***In thousands of crates. (a) Five states including Seventh district. (b) Iowa, Wisconsin. (c) Illinois, Iowa, Indiana. (d) Michigan, Wisconsin. (e) Michigan, Indiana, Wisconsin. (f) Michigan. (g) Michigan, Illinois, Indiana, Iowa. (h) Illinois.

FLOUR PRODUCTION IN THE SEVENTH DISTRICT

Changes in September, 1928, from previous months

	PER CENT CHANGE FROM		COMPANIES INCLUDED
	AUGUST 1928	SEPTEMBER 1927	
Production (bbls.)	+ 1.5	- 1.1	30
Stocks of flour at end of month (bbls.)	+ 8.9	- 3.9	27
Stocks of wheat at end of month (bu.)	- 3.7	- 7.7	27
Sales (volume)	-34.4	-16.1	12
Sales (value)	-32.7	-20.5	12

Production includes wheat and other flours. Balance of items refer to wheat flour only.

Grain Marketing—Smaller quantities of grain were handled at interior primary markets in the United States during September than in August or a year ago. The movement expanded for wheat and corn and declined for oats in comparison with the 1923-27 September average; reshipments of oats gained over last year. Visible supplies of all grain, with the exception of corn, increased in the United States on October 13 over the preceding month; stocks of wheat, rye, and barley were considerably in excess of a year ago, but holdings of corn and oats were smaller than in 1927. Trading in grain futures by members of the Chicago Board of Trade decreased 33.8 per cent in volume from August and 34.4 per cent from last September. Prices averaged

Bonds—Prices during September held at approximately the level of August. Investors showed considerable interest in convertible and participating industrial bonds, while favor was shown, as for some time past, by institutions and private investors toward high grade public utility, municipal, real estate, and foreign securities, all of which had been priced to sell. Sales of securities, both new and established issues, were larger in volume as compared with August, though noticeably smaller than in September, 1927.

slightly above those of August; quotations for contract wheat eased in September.

Movement of Live Stock—September receipts of live stock at public stock yards in the United States exceeded those of August and a year ago. The number of cattle, calves, and hogs decreased in comparison with the 1923-27 September average, while the marketing of lambs increased.

LIVE STOCK SLAUGHTER

	CATTLE	HOGS	LAMBS AND SHEEP	CALVES
Yards in Seventh District, September, 1928	226,300	460,546	366,757	85,240
Federally Inspected Slaughter, U. S.				
September, 1928	764,212	2,508,303	1,307,442	352,091
August, 1928	716,567	2,545,335	1,196,112	368,799
September, 1927	827,725	2,533,819	1,185,169	357,008

The movement of animals to feed lots expanded more than usual for September and was above 1927 and the five-year average.

AVERAGE PRICES OF LIVE STOCK

(Per hundred pounds at Chicago)

	WEEK ENDED		MONTHS OF	
	OCTOBER 13, 1928	SEPT. 1928	AUGUST 1928	SEPT. 1927
Native Beef Steers (average)	\$15.25	\$16.00	\$15.25	\$12.70
Fat Cows and Heifers	9.35	10.25	10.15	8.25
Calves	15.75	17.35	16.60	15.75
Hogs (bulk of sales)	9.90	11.95	11.50	10.50
Yearling Sheep	9.50	10.60	11.55	9.70
Lambs	12.95	14.15	14.55	13.60

Meat Packing—Slaughtering establishments in the United States reported September production above that of the preceding month and slightly below last year. Employment for the last payroll of the period increased 1.6 per cent in number, 3.6 per cent in hours worked, and 4.4 per cent in value over corresponding data for August. Domestic demand averaged good for lard, dry salt pork, and smoked meats, and fair for fresh pork; trade in beef and lamb was fair until mid-month, but tended to drag under an increasing supply toward the close. Sales billed to domestic and foreign customers by fifty-six meat packing companies in the United States totaled 11.0 per cent more in value than in August and 11.7 per cent in excess of September, 1927. Domestic inquiry remained fair to good at the beginning of October, though not quite equal to a month previous. Lamb prices declined, but quotations for most other packing-house products averaged higher in September than in August; prices showed a marked downward trend during the third week of the month and early in October. Inventories at packing plants and cold-storage warehouses in the United States decreased on October 1 from the beginning of September, a year ago, and the 1923-27 October 1 average. Stocks of beef and lamb gained over the preceding month, lard and lamb holdings were above average, and all three increased in volume over the corresponding date of 1927.

Shipments for export aggregated slightly less than in August, although individually half of the companies reported a substantial gain in the comparison. Foreign inquiry for lard showed some signs of improving with the beginning of autumn; demand for meats remained rather dull. Prices were indicated on a more satisfactory basis

than a month ago, with Continental quotations averaging about in line with the United States and with prices in the United Kingdom continuing somewhat below Chicago parity. Consignment stocks already landed and in transit to European countries on October 1 decreased from the beginning of September.

Dairy Products—Butter production in the Seventh Federal Reserve district showed a seasonal recession of 20.7 per cent in September from the preceding month, but was at a level 12.2 per cent higher than a year ago, according to a compilation for sixty-eight creameries. Similar trends were indicated for the United States by the statistics of the American Association of Creamery Butter Manufacturers. The tonnage of creamery butter billed to customers by seventy companies in the Seventh district decreased 22.7 per cent from August and 3.8 per cent from last year. Wisconsin

consin markets received American cheese from factories within that state in a volume 2.7 per cent smaller during the four weeks ended September 29 than in the preceding period and in quantities 22.9 per cent larger than a year ago; redistribution from these centers gained 11.6 and 6.7 per cent in the respective comparisons. Inventories of dairy products at cold-storage warehouses and packing plants in the United States declined on October 1 from the beginning of September; the stock of eggs and cheese increased over a year ago, while butter holdings decreased; all were above the 1923-27 October 1 average. September receipts of dairy products at Chicago were smaller than in August; the quantity of butter and eggs slightly exceeded that of a year ago, but the tonnage of cheese was considerably less than in 1927. Prices averaged higher than in August.

COAL

Unexpected cool weather the latter part of September stimulated demand for domestic sizes of coal to a marked extent, and dealers in this territory were pushed to fill orders. This seasonal activity, however, had been preceded by a period of extreme dullness, and the market for steam coal has shown no improvement. A reduction in wages became effective in Illinois the middle of September, following conferences in July and August, but the effect on the situation in this district has not yet become apparent. Price quotations are below those of a year ago.

September production of coal in Illinois aggregated

4,367,941 tons, a gain of more than 500,000 tons over August. Output for the first nine months of this year totaled 36,913,417 tons, compared with 28,658,560 tons for the corresponding period of 1927. Mines in operation during the month numbered 167, compared with 125 a month previous; 50,785 men were employed for an average of 15.7 days, against 36,681 and 17.1 days in August. United States production of bituminous coal in September totaled 41,301,000 tons, or slightly in excess of the preceding month and a little under a year ago.

INDUSTRIAL EMPLOYMENT CONDITIONS

Industrial employment as a whole showed little change in volume during the period August 15 to September 15, the losses in a number of industries being offset by gains in others. The outstanding increase was in the metals and metal products group where 1.9 per cent more workers were engaged and their earnings increased 1.2 per cent. Lumber and rubber products likewise registered considerable gains in employment and payrolls. Food products showed a wide divergence in trend, meat packing, bread products, and confectionery putting more men to work, while flour and dairy products, beverages, and ice manufacturing reported losses. Definite recessions were recorded for leather products, for stone, clay, and glass products, in the manufacture of cloth-

ing, and to some extent also in the vehicles group. At Detroit, according to the reports of the Employers' Association of that city, employment continued to expand until the week ending September 18, when the volume was 4.6 per cent higher than on August 21, and 52.8 per cent above the corresponding date a year ago. Since then a slight decline has been in evidence, employment on October 9, or three weeks later, registering 2.6 per cent less. The free employment offices reported a reduction in the ratio of applicants to available positions during the month of September, Illinois showing a decline from 138 per cent to 130, Indiana from 113 to 108, while in Iowa there was practically no change, the ratio dropping from 215 per cent to 214.

EMPLOYMENT AND EARNINGS—SEVENTH FEDERAL RESERVE DISTRICT

INDUSTRIAL GROUPS	NUMBER OF WAGE EARNERS			TOTAL EARNINGS		
	WEEK ENDED			WEEK ENDED		
	SEPTEMBER 15 1928	AUGUST 15 1928	PER CENT CHANGE	SEPTEMBER 15 1928	AUGUST 15 1928	PER CENT CHANGE
All groups (10).....	360,876	358,154	+ 0.8	\$9,757,648	\$9,762,115	- 0.1
Metals and metal products (other than vehicles).....	143,475	140,862	+ 1.9	3,890,690	3,843,716	+ 1.2
Vehicles.....	37,684	37,839	- 0.4	1,166,499	1,206,516	- 3.3
Textiles and textile products.....	27,063	27,309	- 0.9	631,042	642,643	- 1.8
Food and related products.....	47,942	48,088	- 0.3	1,222,145	1,197,119	+ 2.1
Stone, clay, and glass products.....	14,684	14,979	- 2.0	422,710	452,860	- 6.7
Lumber and its products.....	30,750	30,023	+ 2.4	772,436	755,139	+ 2.3
Chemical products.....	10,009	9,946	+ 0.6	259,495	260,359	- 0.3
Leather products.....	14,846	14,956	- 0.7	323,147	336,386	- 3.9
Rubber products.....	3,987	3,890	+ 2.5	101,094	97,993	+ 3.2
Paper and printing.....	30,436	30,262	+ 0.6	968,390	969,384	- 0.1

MANUFACTURING ACTIVITIES AND OUTPUT

Automobile Production and Distribution—A gain of 58.5 per cent over the corresponding month a year ago was recorded in September output of passenger automobiles by manufacturers in the United States, bringing production for the first nine months of this year to 20.6 per cent above the same period of 1927 and to within 2.8 per cent of the 1926 record for the nine months. The total of 358,872 represents a decline of 10.4 per cent from the August level. Truck production of 54,850 declined 9.7 per cent from

August, but exceeded the volume of last September by 61.6 per cent.

Distribution of cars in the Middle West, though falling below the level of the preceding month, continued to show substantial gains over the corresponding month of 1927. Stocks of new cars on hand increased considerably over August 31 and averaged higher than a year ago, and used car stocks also increased in both comparisons. Sales made on the deferred payment plan by twenty-five dealers aver-

aged 44.0 per cent of their total retail sales in September, compared with 43.4 per cent a month previous and 43.9 per cent a year ago.

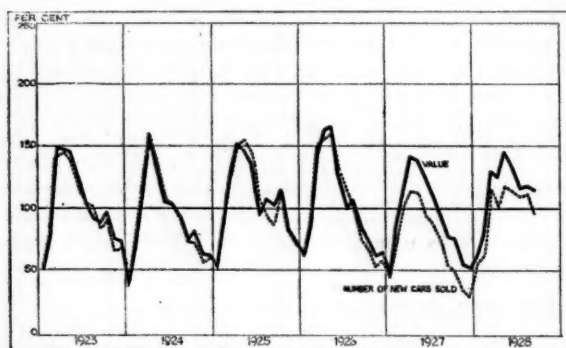
MIDWEST DISTRIBUTION OF AUTOMOBILES

Changes in September, 1928, from previous months

	PER CENT CHANGE FROM AUGUST 1928	SEPTEMBER 1927	COMPANIES INCLUDED
New cars			
Wholesale—			
Number sold	-32.0	+26.9	25
Value	-34.3	+12.5	25
Retail—			
Number sold	-15.5	+78.5	78
Value	-3.5	+42.2	78
On hand September 29—			
Number	+28.6	+5.6	48
Value	+27.8	+4.4	48
Used cars			
Number sold	-13.1	+24.5	77
Salable on hand—			
Number	+8.4	+9.9	44
Value	+14.5	+7.7	44

AUTOMOBILE DISTRIBUTION IN THE MIDDLE WEST

Sales at Retail—84 Dealers



1923-1924-1925 monthly average sales = 100. Latest figures, September, 1928: Number of New Cars Sold, 96.2; Value, 114.9.

Agricultural Machinery and Equipment—Reports from eighty-one manufacturers in the United States show that sales of agricultural machinery and equipment to domestic and foreign customers decreased in September from August 26.6 per cent in the tractor, thresher, combination harvester-thresher line, and 5.5 per cent for "all other" (exclusive of barn supplies), but increased 14.1 per cent in the barn equipment group. Increases of 13.2 per cent in the heavy group, of 10.3 per cent in barn equipment, and of 16.4 per cent in light machinery sales, were recorded in comparison with a year ago.

PRODUCTION AND SALES OF FARM EQUIPMENT IN THE UNITED STATES

Changes in September, 1928, from previous months

	PER CENT CHANGE FROM AUGUST 1928	SEPTEMBER 1927	COMPANIES INCLUDED
Domestic sales billed.....	-21.1	+10.0	81
Sales billed for export.....	-10.6	+25.7	45
Total sales billed.....	-18.1	+14.5	81
Production	-0.2	+42.6	79

Production computed from average employment during the month. Sales based on value.

Iron and Steel Products—Shipments of finished steel during the first nine months of 1928 by Chicago district mills totaled considerably larger than in the corresponding period of 1927. September operations and sales for the most part were substantially heavier than in the preceding month, and the early part of October showed an excess of orders over current output. Lack of railroad buying, however, has exerted a deterring effect on activity with some mills. Operations by the end of September had moved up to about 85 per cent of capacity. Steel ingot output in the United States was larger than for any September, and the daily average of 165,903 tons exceeded that of August by 7.2 per cent and September a year ago by 32.0 per cent. Pig iron production for the country, though slightly

less in the aggregate than a month previous, gained in the daily average and was considerably higher than last September; output in the Illinois and Indiana district followed a similar trend. An increase of more than 74,000 tons was recorded in unfilled orders of the United States Steel Corporation on September 29 over August 31, in contrast to a decline in the same comparison last year.

The price situation shows continued strength. The composite average of leading iron and steel products, as compiled by *Iron Trade Review*, has risen steadily for nine weeks, standing at \$35.57 on October 17, which compares with \$35.23 on September 19, and \$35.55 on October 20 a year ago. Scrap metal prices have been very firm and have exhibited further strength since the middle of September.

Increases over a month previous and a year ago were reported in orders booked during September by malleable casting foundries of the Seventh district, while steel casting foundries showed a gain in the yearly comparison only. Shipments and production receded from the August level. These items gained over last September for malleable castings and declined for steel. Orders booked, shipments, and production of stove and furnace manufacturers exceeded the August volume and that of September, 1927.

Shoe Manufacturing, Tanning, and Hides—Preliminary estimates of the United States Department of Commerce show that shoe production in the Seventh Federal Reserve district declined 12.1 per cent in September from the preceding month. Tanning operations and sales of leather decreased from August and a year ago, according to reports sent direct to this bank by representative companies in this district. Prices of leather declined.

The Chicago market for packer green hides and calf skins was a little more active during September than in the preceding period. Shipments from the city and purchases by district tanners were smaller than in August. Prices opened at firm levels and then trended downward toward the close of the month and during the first half of October.

Furniture—For the first time this year, data on orders booked and shipments by furniture manufacturers in the district reflected gains over the corresponding month of 1927. September orders of twenty-three firms totaled 11.6 per cent more than a year ago, while shipments gained 13.2 per cent; slightly less than half the firms reported increased orders, but the majority had larger shipments. In the comparison with August, orders booked showed an expansion of 30.3 per cent and shipments of 20.7 per cent. The volume of shipments was smaller than new orders, but cancellations brought unfilled orders at the end of the month to 0.7 per cent below the amount held on August 31, and the aggregate fell 5.2 per cent below a year ago. Production averaged about the same in September as a month previous and as last September.

Raw Wool and Finished Woolens—Demand for raw wool expanded during the first half of September, and prices remained fairly stable at August levels. Some reports indicate that sales during the month were decidedly heavier than a year ago. The weakness shown at the London auction and the Australian sales, however, retarded activity to a considerable extent the latter part of September and early October, and manufacturers in recent weeks have been coming into the market to cover immediate needs only. Prices of domestic wool, especially the finer grades, have shown a slight easing tendency. Production has been accelerated by woolen goods manufacturers, although reports vary as to the amount of orders booked for spring materials.

BUILDING MATERIAL AND CONSTRUCTION ACTIVITIES

In the lumber industry, wholesale and manufacturing interests experienced a decline in activity during September, a condition that prevailed also at this season a year ago. According to reports of twenty-one firms, sales fell off 13.6 per cent in dollar value and 11.1 per cent in board foot measure from the preceding month, outstanding accounts were reduced 3.7 per cent, and stocks followed the downward trend that has been in evidence since early spring. At retail, the demand for lumber continued active, sales at 212 yards gaining 14.5 per cent over August; outstandings increased 3.3 per cent, and stocks showed a curtailment from the preceding month. Prices remained firm in both the wholesale and retail market.

In comparison with September last year, wholesale trade showed a gain of 1.8 per cent in value and of 9.4 per cent in volume; outstanding accounts increased 7.0 per cent, and stocks declined. For retail trade, the yearly comparison revealed a loss of 0.3 per cent in dollar sales, a gain of 0.7 per cent in accounts receivable, and some contraction in the volume of stocks. The ratio of accounts to sales averaged 284 per cent, as compared with 316 the month previous and 286 at the close of September, 1927. At wholesale, the corresponding ratios were 136, 126, and 133 per cent, respectively.

Operations in the cement industry continued active during September, and a large volume of outdoor work still remains to be finished before freezing weather sets in. Both

production and shipments, however, showed a considerable curtailment from the preceding month. Stocks also were reduced, but continue greatly in excess of a year ago. The brick industry showed a let-up in activity with some increase in stocks.

Building Construction—Contracts awarded in the Seventh district during September totaled \$99,175,813, of which \$39,158,592 was for residential construction. The total was 8.4 per cent less than in August and 6.7 per cent below the volume recorded for September, 1927, while contracts awarded for residential construction fell 10.3 per cent below the August figure and 21.6 per cent below a year ago. Building contracts for the first nine months of the year have been 11.1 per cent in excess of those for the corresponding period of 1927, residential contracts alone showing an increase of 12.7 per cent or only slightly more than that shown by other types of construction. Permits issued in fifty cities of the district increased over August, 2.7 per cent in number and 1.5 per cent in estimated cost, but were less than a year ago, by 1.8 and 16.8 per cent, respectively, in number and cost. For the period of January through September, there have been 9.3 per cent fewer permits issued than a year ago, with a decline of 12.9 per cent in the estimated cost. Additional returns for fifty-one cities for which the monthly comparison is available, showed a loss of 0.2 per cent in cost and a gain of 2.1 per cent in the number of permits issued.

MERCHANDISING CONDITIONS

Wholesale Trade—September sales by wholesale firms in the district were reported as heavier than a month previous or a year ago by half the lines and as smaller in both these comparisons by the others. For the first three quarters of this year, grocery, hardware, and dry goods sales have totaled less and drug, shoe, and electrical supply trade larger than for the same period of 1927. Stocks in most lines

were lower on September 29 than at the end of August. Collections increased over August and over September last year in the majority of groups; comments thereon indicate that they are fair or good. Prices continue firm, with an upward tendency in certain grocery lines. Conditions show steady improvement in the agricultural sections of Iowa.

WHOLESALE TRADE DURING THE MONTH OF SEPTEMBER, 1928

	Net Sales During Month PER CENT CHANGE FROM PRECEDING SAME MONTH LAST YEAR			Stocks at End of Month PER CENT CHANGE FROM PRECEDING SAME MONTH LAST YEAR			Accounts Outstanding End of Month PER CENT CHANGE FROM PRECEDING SAME MONTH LAST YEAR			Ratio to NET SALES DURING MONTH			Collections During Month PER CENT CHANGE FROM PRECEDING SAME MONTH LAST YEAR		
Groceries	(34) - 2.1	(34) - 3.6		(21) + 2.7	(21) + 1.9		(32) + 1.6	(32) - 8.7	(32)	101.6		(27) - 4.2	(27) - 3.4		
Hardware	(15) + 5.2	(15) + 2.0		(10) - 3.5	(10) - 8.1		(15) + 3.7	(15) + 2.9	(15)	197.9		(13) + 2.9	(13) - 3.6		
Dry Goods	(13) + 13.8	(13) + 3.3		(10) - 10.5	(10) - 4.8		(13) + 13.2	(11) + 0.6	(13)	264.5		(11) + 7.6	(9) + 2.2		
Drugs	(13) - 2.3	(13) - 4.7		(11) - 1.1	(11) - 3.6		(12) + 1.3	(12) - 0.3	(12)	137.6		(8) + 0.8	(6) + 5.9		
Shoes	(8) - 5.4	(8) - 7.8		(6) - 4.9	(6) + 6.9		(7) + 5.7	(7) - 1.2	(7)	264.7		(6) + 8.2	(5) + 9.1		
Electrical Supplies	(42) + 4.1	(42) + 17.5		(35) + 9.6	(35) + 3.3		(41) + 9.0	(41) + 17.4	(41)	139.8		(32) - 2.8	(31) + 6.8		

Figures in parentheses indicate number of firms included.

Department Store Trade—Considerable expansion took place during September in department store trade of the Seventh Federal Reserve district. Sales of 112 stores totaled 28.3 per cent more than a month previous and gained 14.9 per cent over September, 1927. In the first nine months of 1928, sales showed an aggregate increase of 5.4 per cent over the same period of last year. The larger cities—Chicago, Detroit, Milwaukee, and Indianapolis—as well as the smaller centers shared in the gains over August and a year ago. Stocks averaged 8.4 per cent heavier for the district on September 29 than a month previous and were 1.8 per cent above the corresponding date of 1927. Stock turnover for the month was 36.1 per cent compared with 32.7 per cent last September, and for the period averaged 282.1 per cent against 272.9 per cent a year ago. Collections during September showed gains of 3.0 and 9.7 per cent in the respective month-to-month and yearly comparisons, while

accounts receivable the end of the month increased 19.9 and 16.1 per cent. September, 1928, collections averaged 37.5 per cent of accounts receivable the end of August, which compares with 36.8 per cent a year ago.

Retail Shoe Trade—Decided gains over the preceding month and a year ago were shown in September sales of shoes by twenty-one department stores and twenty-five retail dealers of the Seventh district. The aggregate increased 54.1 per cent in the monthly and 22.2 per cent in the yearly comparison, with only eight reports indicating declines in either. Sales for the year to date, which have been running behind last year's, were brought to 2.0 per cent above the corresponding period of 1927. Stocks of thirty-nine firms on September 29 exceeded those on August 31 by 3.8 per cent and were 7.0 per cent larger than a year ago. Seventeen dealers report that September collections gained 2.3 per cent in the aggregate over the preceding

month and 16.1 per cent over last September. At the end of the month accounts receivable totaled 16.6 per cent more than a month previous and 2.8 per cent above a year ago. Their ratio to sales during the month averaged 56.8 per cent this September, 60.6 per cent for August, and 63.7 per cent for September, 1927.

Retail Furniture Trade—The September total of furniture sales by twenty-four dealers and twenty-four department stores reporting to this bank exceeded that for August by 45.1 per cent and the September, 1927, figure by 17.9 per cent. Installment sales of eighteen dealers increased 45.6 per cent as compared with the preceding month and 28.2 per cent over last September. Stocks on September 29, as reported by both department stores and dealers, were larger by 0.4 and 1.7 per cent, respectively, than a month previous or a year ago. Installment collections of fifteen dealers decreased 8.1 and 8.3 per cent in the month-to-month and

yearly comparisons, while total collections of twenty-one firms declined 10.6 and 9.3 per cent. Accounts receivable on dealers' books the end of September exceeded those on August 31 by 5.8 per cent and were 3.4 per cent heavier than a year ago.

Chain Store Trade—The number of stores operated by twenty-two chains increased 0.9 per cent in September over the preceding month and was 21.4 per cent above a year ago. Aggregate sales by these stores gained 3.8 and 21.8 per cent, respectively, in the comparisons, while average sales per store increased 2.8 and 0.3 per cent. Grocery, five-and-ten-cent, musical instrument, cigar, furniture, and women's clothing chains showed gains in the month-to-month comparison, with the drug, shoe, and men's clothing groups recording declines. Cigar, musical instrument, furniture, and men's clothing chains reported a recession in sales from last September.

MONTHLY BUSINESS INDICES COMPUTED BY FEDERAL RESERVE BANK OF CHICAGO

(Index numbers express a comparison of unit or dollar volume for the month indicated, using the monthly average for 1923-1924-1925 as a base, unless otherwise indicated. Where figures for latest month shown are partly estimated on basis of returns received to date, revisions will be given the following month. Data refer to the Seventh Federal Reserve District unless otherwise noted.)

	No. of Firms	Sept. 1928	Aug. 1928	Sept. 1927	Aug. 1927
Meat Packing—(U. S.)—					
Sales (in dollars).....	59	128.8	116.1	115.3	109.3
Casting Foundries—					
Shipments:					
Steel—In dollars	15	63.9	75.6	68.9	96.3
In tons	15	61.7	74.4	72.6	97.1
Malleable—In dollars	17	68.2	73.1	60.3	62.0
In tons	15	105.1	102.9	75.1	79.2
Stoves and Furnaces—					
Shipments (in dollars).....	12	168.7	117.4	164.2	125.8
Agricultural Machinery & Equipment—(U. S.)—					
Domestic Sales (in dollars).....	83	147.9	187.6	134.4	166.8
Exports (in dollars).....	56	347.3	387.5	277.0	234.0
Total Sales (in dollars).....	83	180.0	219.7	157.2	177.6
Production	82	146.0	146.1	106.2	115.6
Furniture—					
Orders (in dollars).....	27	139.3	106.3	116.6	110.5
Shipments (in dollars).....	27	138.4	113.5	122.7	121.3
Electric Energy—					
Output of Plants (KWH).....	8	145.6	151.8	132.4	133.7
Industrial Sales (KWH).....	8	186.4	183.0	156.5	160.2
Flour—					
Production (in bbls.).....	32	107.9	106.4	118.5	118.3
Output of Butter by Creameries—					
Production	74	108.8	137.3	97.0	134.3
Sales	74	93.5	122.4	95.9	116.8
Automobiles—					
Distribution in Middle West:					
New cars—Wholesale—Number sold....	32	148.5	210.5	113.4	181.1
Value	32	116.7	170.6	99.2	147.1
New cars—Retail —Number sold....	84	96.2	111.3	52.6	72.8
Value	84	114.9	118.5	78.6	94.0
New cars—On hand—Number	48	146.2	107.5	139.1	125.4
Value	48	129.5	98.1	124.3	108.6
Used cars—Number sold....	78	135.5	158.7	98.3	123.5
Used cars—On hand—Number	46	131.7	121.6	115.5	109.2
Value	46	147.7	129.3	134.8	126.4
Production (U. S.): Passenger cars.....		121.9	136.1	76.9	93.2
Trucks		152.9	169.4	94.6	96.0
Freight Carloadings—(U. S.)—					
Grain and Grain Products.....		135.3	126.3	133.0	123.0
Live Stock		106.9	76.9	101.1	86.7
Coal		109.3	96.2	109.6	103.4
Coke		88.4	78.4	84.8	82.1
Forest Products		93.2	93.2	98.0	96.7
Ore		169.5	166.1	147.3	160.4
Merchandise and Miscellaneous.....		125.7	116.2	122.8	114.7
Total		121.4	111.6	118.9	112.2
Iron and Steel—					
Pig Iron Production: ¹					
Illinois and Indiana.....		117.3	116.4	102.6	106.6
United States		103.9	103.0	94.2	96.8
Steel Ingot Production—(U. S.) ¹		124.5	116.1	94.3	97.2
Unfilled Orders U. S. Steel Corp.....		77.5	75.9	65.9	66.9

	No. of Firms	Sept. 1928	Aug. 1928	Sept. 1927	Aug. 1927
Wholesale Trade—					
Net Sales (in dollars):					
Groceries	37	103.4	105.5	104.9	101.7
Hardware	16	98.1	92.2	96.2	91.3
Dry Goods	12	109.7	96.1	105.2	98.3
Drugs	10	104.4	104.5	110.9	100.3
Shoes	8	110.5	116.9	119.9	122.7
Retail Trade (Dept. Stores)—					
Net Sales (in dollars):					
Chicago	31	109.1	90.7	95.8	89.9
Detroit	4	209.5	130.8	168.2	126.1
Indianapolis	5	98.7	81.4	90.0	90.3
Milwaukee	5	113.6	94.9	104.3	90.5
Outside	58	103.7	90.4	92.4	92.3
Seventh District	103	125.4	97.5	108.3	96.8
Retail Trade—(U. S.)—					
Department Stores.....	565	106	85	100	89
Mail Order Houses.....	4	143	127	118	105
Chain Stores:					
Grocery	34	200	205	171	170
Drug	13	164	169	137	140
Shoe	7	130	109	108	101
Five and Ten Cent	14	144	134	128	130
Candy	4	122	123	119	110
Apparel	5	246	197	198	165
Cigar	4	105	104	106	106
Stamp Tax Collections—²					
Sales or Transfers of Capital Stock.....		271.6	197.7	105.8	237.0
Sales of Produce on Exchange—Futures		80.9	82.7	110.2	88.5
U. S. Primary Markets—³					
Grain Receipts:					
Oats		70.3	128.5	77.6	119.3
Corn		91.2	95.3	108.5	79.0
Wheat		214.8	234.6	235.9	234.8
Grain Shipments:					
Oats		47.3	54.6	45.2	38.4
Corn		60.3	71.0	64.3	55.2
Wheat		118.3	133.8	147.8	136.3
Building Construction—					
Contracts awarded (in dollars):					
Residential		133.0	148.3	170.1	146.0
Total		144.8	158.1	155.2	160.1
Permits:					
Chicago	Number	43.5	49.8	57.8	66.1
Cost.....		71.7	57.5	99.7	98.7
Indianapolis	Number	68.5	65.8	79.0	89.3
Cost.....		92.5	94.4	65.5	91.6
Des Moines	Number	78.4	54.1	67.0	73.3
Cost.....		44.5	27.7	23.2	43.3
Detroit	Number	84.4	78.5	78.0	78.6
Cost.....		81.0	83.4	115.6	66.6
Milwaukee	Number	82.0	94.7	92.1	111.3
Cost.....		116.1	144.4	86.1	103.3
Others (45)	Number	106.8	97.2	103.7	115.5
Cost.....		100.5	114.4	99.7	148.6
Fifty Cities	Number	86.7	84.5	88.4	98.7
Cost.....		83.3	82.2	100.3	102.3

1. Average daily production; 2. First Illinois internal revenue district; 3. Monthly average receipts 1923-24-25 = 100.

1.1
1.7
1.3
1.6
1.2
1.3
1.6
1.0
1.3
1.3
1.3
1.5
1.5
1.7
1.5